

REMARKS

Upon entry of the above amendments, Claims 34, 35, 43, 44, 49, 50, 52, 53, 58, 59, 61, 62, 64, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91 and 93-109 will be amended. Claims 34-117 will remain pending in the present application. Claims 34, 35, 43, 44, 52, 53, 61 and 62 are independent claims.

Applicant respectfully submits that the amendments to the claims are fully supported by the original disclosure, and introduce no new matter therewith. Applicant respectfully requests reconsideration and allowance in view of the foregoing amendments and the following remarks.

Entry of this Amendment is proper under 37 C.F.R. § 116 because the amendments:

(a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issues that would require further consideration and/or search as the amendments and arguments presented merely amplify issues previously discussed throughout prosecution; and (c) place the application in better form for an appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented as they are in response to new grounds of rejection entered in the Final Rejection. Applicant respectfully requests entry of the Amendment.

1. Claims 34-117 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite and incomplete. Applicant respectfully traverses this rejection.

The Office Action noted that the phrase "all regions containing a document information" recited in each independent claim renders the claims indefinite. The Office Action also noted that omitted structural relationships for the format database that manages information such as coordinates, document classification, and specific information for embedding watermarks renders the claims incomplete.

The Office Action then states that after "reviewing the specification pages 75-80 it is still unclear how applicant is claiming the invention." The Office Action then asserts that according "to the specification "document information" shows the identification of the document classification identified from the specific part," and states that therefore, with respect to Claim 61, "the claim would mean 'An image verifying method comprising of inputting image data which a location information indicates a plurality of regions in said image data for embedding a digital watermark all regions containing a showing of the identification of the document classification identified from the specific part.'"

Applicant respectfully disagrees with the asserted meaning of Claim 61 by the Office Action, and submits that pages 75-80 of the specification are not the only places in the specification where "document information" is discussed.

Initially, Applicant has amended each of the independent claims to change the phrase "all regions containing a document information" to --a predetermined region thereof identified by a document information--.

With respect to Claim 61, amended independent Claim 61 now recites an image verifying method that inputs image data in which a location information indicates a plurality of regions in the image data for embedding a digital watermark in a predetermined region identified by a document information among the plurality of regions in said image data, extracts the digital watermark from said image data based on said location information, and verifies whether the image data in the predetermined region, in which the digital watermark is embedded, has been tampered.

Applicant respectfully submits that amended Claims 34, 35, 43, 44, 49, 50, 52, 53, 58, 59, 61, 62, 64, 65, 67, 69, 71, 73, 75, 77, 709, 81, 83, 85, 87, 89, 91, 93 and 94-109 fully comply with 35 U.S.C. § 112, second paragraph.

In particular, the specification describes the elements set forth in the claims. Amended independent Claim 34 recites phrases including an image providing apparatus, an image utilizing apparatus, image data, a plurality of regions, a location information, a digital watermark, a predetermined region, and a document. The specification plainly describes these phrases. For example, with respect to the ninth embodiment described in pages 55-63, the image apparatus embeds a digital watermark in an original image 205 partially according to a document format information 215, which is based on a document information 214 (see page 55 of the specification and Fig. 24 regarding the ninth embodiment of the invention). The digital watermark embedding apparatus 210 then sends the original image 205, in which a digital watermark is embedded, as a processed image 206 to a digital watermark extracting apparatus 202, which is one example of an

image utilizing apparatus (see page 55 of the specification and Fig. 24 regarding the ninth embodiment of the invention).

In the present invention, the claimed "location information" corresponds to 'document format information' set forth in the specification. The specification describes on page 60 how the document format information 215 can be coordinates associated with a position of a particular region in the image that is associated with particular document information 214 (see also page 74, lines 8-16). The document format information 215 indicates the location where the digital watermark should be embedded. The phrase "document information" refers to the type of image content for a particular region, and can include various types of information such as a date, a certificate number, a name, a sex, a birth date, an address, a telephone number, a sick name, etc., not just classification information asserted by the Office Action (see page 57, lines 21-28; Fig. 25). Fig. 27 shows examples of regions where the digital watermark can be embedded (see page 62, lines 10-18).

Applicant respectfully submits that amended independent Claims 34, 35, 43, 44, 52, 53, 61 and 62 are not incomplete because they include all essential structural cooperative relationships of elements. With respect to the phrases "classification" and "specific part," Applicant respectfully submits that these phrases are not included in the claims because they are not essential to the claims. Nevertheless, with respect to "classification," the specification describes, for example, on page 58, lines 2-13, how the identification number R4 is written in the form of a document classification information to identify document classification (see Fig. 25).

With respect to "specific part," this corresponds to a particular region of the document, such as regions R1, R2, R3, R4, etc. in Fig. 25.

Applicant respectfully submits that these rejections are overcome, and requests reconsideration and withdrawal of the rejection of Claims 34-117 under 35 U.S.C. § 112, second paragraph.

2. Claims 34-37, 42-46, 49, 50, 52-55, 58, 59, 61, 62, and 66-117 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kurowski (U.S. Patent No. US 6,553,127 B1). Applicant respectfully traverses this rejection.

Amended independent Claim 34 recites an image processing system image processing system including "an image providing apparatus which defines a location information indicating a plurality of regions in image data for embedding a digital watermark in *a predetermined region identified by a document information* among the plurality of regions and providing said image data, in which said digital watermark is embedded based on said location information." As described, for example, for Fig. 27, the digital watermark is embedded in the shaded parts of the figure, and the shaded parts are designated by the document format information 215 (see page 62, lines 10-13).

In Kurowski, the block selector 120 selects blocks of a data stream according to a texture criterion that measures a variation of selected characteristics associated with each data element of the data stream (see Fig. 1; col. 3, lines 61-63). The block selector 120 tests each incoming block to determine whether a predetermined criterion is satisfied. For example, the block

selector may evaluate a "texture" criterion for each block and output a texture value where 0 (zero) indicates a completely flat, featureless and relatively unchanging field within a block and where higher numbers indicate increasing spectral content (see col. 6, lines 15-24). In such an embodiment, the watermark embedder 130 receives each block output from the blocker/buffer 115. As long as the block selector 120 does not generate a signal 125 disabling the embedding of a watermark, a watermark is embedded in each and every block. However, should any block fail to satisfy the criterion, the block selector 120 will disable the embedding of a watermark for that block (see col. 6, lines 26-33).

Kurowski does not teach the recited image providing apparatus because Kurowski instead teaches embedding a watermark based on a signal associated with the satisfaction of a criterion. Embedding a watermark in this manner does not "embed[] a digital watermark in *a predetermined region identified by a document information* among the plurality of regions." Hence, Kurowski does not teach or suggest the recited features of Claim 34, and therefore does not anticipate Claim 34. Accordingly, Claim 34 is allowable over Kurowski.

Independent Claim 35 has been amended to recite similar features as claim 34 is allowable over Kurowski for similar reasons as discussed with respect to claim 34.

Claims 36, 37, 42, 66, 67, 90, 91, 94, and 95 variously depend from claim 34 and are allowable as being dependent from an allowable claim.

Claims 36, 37, 68, 69, 92, 93, 96, and 97 variously depend from claim 35 and are allowable as being dependent from an allowable claim.

Independent claims 43 and 44 have been amended to recite similar features as claim 34 are allowable over Kurowski for similar reasons as discussed with respect to claim 34.

Claims 45, 46, 49, 70, 71, 74, 75, 98, and 99 variously depend from claim 43 and are allowable as being dependent from an allowable claim.

Claims 45, 46, 50, 72, 73, 76, 77, 108, and 109 variously depend from claim 44 and are allowable as being dependent from an allowable claim.

Independent claims 52 and 53 have been amended to recite similar features as claim 34 are allowable over Kurowski for similar reasons as discussed with respect to claim 34.

Claims 54, 55, 58, 78, 79, 82, 83, 100, and 101 variously depend from claim 52 and are allowable as being dependent from an allowable claim.

Claims 54, 55, 59, 80, 81, 84, 85, 102, and 103 variously depend from claim 53 and are allowable as being dependent from an allowable claim.

Independent claims 61 and 62 have been amended to recite similar features as claim 34 are allowable over Kurowski for similar reasons as discussed with respect to claim 34.

Claims 86, 87, 104, and 105 variously depend from claim 61 and are allowable as being dependent from an allowable claim.

Claims 88, 89, 106, and 107 variously depend from claim 62 and are allowable as being dependent from an allowable claim.

In view of the above, Applicant respectfully request reconsideration and withdrawal of the rejection of Claims 34-37, 42-46, 49, 50, 52-55, 58, 59, 61, 62, and 66-117 under 35 U.S.C. § 102(e) as being anticipated by Kurowski.

3. Claims 38-41, 47, 48, 51, 56, 57, 60, and 63-65 under 35 U.S.C. § 103(a) as being unpatentable over Kurowski in view of Wong (U.S. Patent No. US 6,504,941 B2). Applicant respectfully traverses this rejection.

Claims 38-41 variously depend from Claim 34. Claim 65 depends from Claim 35. Claims 47-48 and 51 variously depend from Claim 43. Claims 56-57 and 60 variously depend from Claim 52. Claim 63 depends from Claim 61. As discussed above, Kurowski does not teach or suggest the recited features of claims 34, 35, 43, 52, and 61. Wong fails to cure the deficiencies of Kurowski. Instead, Wong teaches stamping the watermark onto the entire area of the image. By stamping a watermark onto the entire area of the image, Wong does not teach "embedding a digital watermark in *a predetermined region identified by a document information* among the plurality of regions." Accordingly, the Office Action fails to establish a *prima facie* case of obviousness for claims 38-41, 47, 48, 51, 56, 57, 60, and 63-65 because the combination of Kurowski and Wong does not teach or suggest the recited features of claims 38-41, 47, 48, 51, 56, 57, 60, and 63-65.

Applicant respectfully submits that these claims are allowable, and requests reconsideration and withdrawal of the rejection of Claims 38-41, 47, 48, 51, 56, 57, 60, and 63-65 under 35 U.S.C. § 103(a) as being unpatentable over Kurowski in view of Wong.

Applicant respectfully submits that the proposed amendments made herein properly respond to the outstanding Final Rejection and represent a *bona fide* effort to satisfactorily conclude the prosecution of this application. Care has been exercised to insure that no new matter has been introduced and that no new issues have been raised that would require further consideration or search. It is felt that no inordinate amount of time will be required on the part of the Examiner to review and consider this amendment. In the event that the application is not allowed, it is requested that this amendment be entered for purposes of appeal.

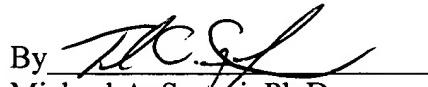
Application No. 09/539,421
Art Unit 2134

Docket No. 32165-159044
Customer No. 26694

4. For the foregoing reasons, Applicant respectfully submits that the present application is in condition for allowance. If such is not the case, the Examiner is requested to kindly contact the undersigned in an effort to satisfactorily conclude the prosecution of this application.

Date: November 25, 2005

Respectfully submitted,

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